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ABSTRACT

This study investigated 394 participants in the 1987 Arkansas Governor's School (AGS) and a comparison group of 60 AGS alternates on selected measures of cognitive development and personal/social acceptance. The AGS is a 6-week intensive residential program for talented high school students who had finished their junior year. Information was obtained on students' understanding of the nature of knowledge and their ability to construct a consistent view of the world through critical evaluation of different viewpoints. AGS attendee data were collected during the final week of the program, and comparison group data were collected via a mailed survey. Students' perceptions of being recognized as talented and the impact of such recognition on social relationships with family and peers were also examined. The W. G. Perry scheme of epistemological thinking was the primary measure of cognitive outcomes, while students' cognitive and ethical growth was determined from an adaptation of the method developed by J. Kurfiss. Personal and social adjustment was determined by an instrument based on program goals and a review of the literature. Results indicate that, when compared to non-participants, AGS attendees demonstrated more sophisticated views of the nature of knowledge and felt only slightly less social acceptance by other high school students. The program effectively developed the students' thinking and, generally, did not increase the participants' alienation from their families and friends. Continued investigations, including a longitudinal follow-up of AGS students, are planned. (TJH)

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CHALLENGING TALENTED YOUTH: THE IMPACT OF THE ARKANSAS GOVERNOR'S SCHOOL ON SELECTED STUDENT OUTCOMES

By Ann Robinson

University of Arkansas-Little Rock

January 1988

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Dr. Ann Robinson, Principal Investigator

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Executive Summary

Introduction

Challenging talented youth: The impact of the Arkansas Governor's School was an investigation of the 1987 Arkansas Governor's School (AGS) attendees and a comparison group of AGS alternates on selected measures of cognitive development and personal/social acceptance. Participants in the study were rising seniors.

In the study, information was obtained on the students understanding of the nature of knowledge and their ability to construct a consistent view of the world through critical evaluation of differing points of view. Students' perceptions of being recognized as talented and the impact of such recognition on social relationships with family and peers was also examined.

Beliefs About Knowledge

Students who attended the AGS group demonstrated more sophisticated views of the nature of knowledge, than an equally talented group of students who did not. These results are a strong indicator of AGS effectiveness in the area of developing students' thinking.

Social Acceptance

Results from the social acceptance measures indicate that, in general, the AGS does not increase alienation from family and close friends. Some differences exist between attendees and nonattendees in terms of acceptance from the general high school cohort. Nonattendees were less likely to state their high school acquaintances treated them differently because of their talent than did AGS attendees.

AGS Experience

By overwhelming percentages, attendees indicated AGS provided opportunities to share interests with like-minded peers and to develop a network of friends they planned to maintain when they returned home.

Future Directions

- Extend the investigation of the AGS impact on the higher level thinking of talented young people.

- Examine the social networks, educational aspirations, and career goals of talented Arkansas youth.

- Investigate the effects of the AGS on the development of talent in young people from disadvantaged backgrounds.

- Examine the ways the AGS faculty translate their expertise into educational experiences for talented students.

- Pursue a longitudinal investigation of the impact of the AGS on Arkansas talented youth.

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Introduction

Thirty years ago Sputnik went up, and a nation trained its resources and its vision on the talented youth of America. Like any public policy, the flow of resources to the education of the gifted fluctuates, but the commitment to excellence does not. In the past three decades, educators concerned about the development of talent in young people have designed and implemented innovative programs to challenge them.

Governors' schools are exemplars of decision makers' response to the need for appropriate educational experiences for talented students. In 1963, Governor Terry Sanford of North Carolina provided the impetus for the first Governor's school. Others helped to translate Governor Sanford's vision into viable programs for able adolescents. Much of the initial design of the Governor's school curriculum was articulated by Virgil Ward, educational philosopher and historian. Ward (1979) argued for services differentiated according to need. Among the principles Ward advanced for educating the gifted were a thorough understanding of the content and methodology of the major academic disciplines, the inculcation of values for social responsibility, and an understanding and acceptance of individual talents and gifts.

In 1980 under the leadership of Governor Bill Clinton, Arkansas implemented its first Governor's School, a five-week intensive residential program for talented high school juniors. The School was authorized in 1979 by Act 106. The Arkansas Governor's School (AGS) has been expanded to six weeks and has been held on the campus of Hendrix College, a liberal arts institution located centrally in the state. The AGS adopted the general framework as delineated by Ward and currently provides a tripartite curriculum: 1. intensive study of an academic discipline 2. comparative examination and integration of various fields of study and 3. attention to personal and social growth.

Since its inception, the AGS has served several hundred talented young people. Table 1 reports the number of students served and the total number of nominations by year. The AGS has conducted in-house classroom evaluations from students each year for formative purposes. Attitudinal surveys have also been administered to parents of AGS attendees and to the teaching faculty of the School. However, no assessment of the effects of the AGS on student outcomes has been conducted to date.

An examination of the program's effects on attendees is timely. Because Governors' schools continue to increase in popularity as a means of serving talented youth, such an evaluation benefits both Arkansas and the nation. In 1980, Arkansas became the fifth state to initiate a Governor's school. In 1988, approximately one-half of the states currently have a Governor's school. Another four to five states are planning them. Steadily increasing interest in Governor's schools resulted in the first National Conference on Governor's Schools in Lexington, Kentucky in the Fall of 1987. In the Fall of 1988, Arkansas will host the second National Conference in Little Rock.

Among those attending the 1987 conference, the discussion of research on Governor's school attendees was lively and informative, but most of the assessments of program impact were limited to one-shot attitudinal surveys, many of them hastily administered at the close of the program. These data are generally useful for improving the program or for documenting positive attitudes toward it, but they do not provide persuasive evidence of the effects of the program on important intellectual and affective outcomes.

In this regard, evaluations of program effectiveness for Governors' schools mirror the problems of evaluations for other kinds of gifted programs. There is too little evaluation. Too much of it is limited to in-house surveys. None of the currently published evaluations of Governor's schools are controlled studies which allow for comparisons between talented youth who participate in them and those equally talented young people who do not. More extensive, controlled evaluations are necessary, particularly in light of the increasing popularity of Governors' schools as vanguard programs for the gifted.

Purpose of the Study

In response to the lack of information about program impact, a study of the effects of the AGS on selected intellective and social outcomes was undertaken. The purpose of the study is two-fold: 1. to establish some baseline descriptive information about AGS attendees and alternates 2. to assess program impact on selected student cognitive and affective outcomes.

Methods

The 454 subjects were 394 participants in the 1987 AGS and a cooperating group of 60 alternates who did not attend the program served as the comparison group. Of the total sample, 220 were male; 234 were female. All subjects had finished their junior year in high school. Participants in the AGS were selected on the basis of their academic performance and school contributions. Applicants were also asked to write an essay about the nature of learning. Those students who applied for the drama, music, and arts portion of the school were selected by audition or juried portfolio. Final selections were made by committees using the case study method of identification. In the selection process, efforts are made to provide a representative distribution of students on the basis of school district, sex, and ethnicity. Anecdotal data from the selection committees indicate that few differences exist between the students who attend and the alternates. This is expected in the case of a highly competitive selection process with approximately three applicants for each program slot. However, subsequent analysis of the data from this study will include statistical tests of comparability of the two groups on selected identification variables, for example aptitude test scores.

Measures of program outcomes were selected on the basis of their relationship to the Governor's school curriculum. Three major components comprise the Arkansas Governor's School curriculum: Area I, Special Aptitude Development; Area II, General Conceptual Development; and Area III, Personal and Social Development. More specifically, Area I is the student's academic or performing arts discipline of choice. Eight academic areas in the humanities, social and natural sciences, mathematics, and performing arts are represented. The emphasis in the Area I classes is on 20th century theory and epistemology in these disciplines rather than the more traditional survey organization in the high school curriculum.

No outcome measure directly related to each of these eight Area I classes was included in this phase of the study. Few standardized instruments for assessing 20th century theory in these disciplines exist. The content of the Area I curriculum could be addressed by teacher-made achievement tests. However, a narrowly prescribed classroom achievement test does not capture the essence of the discipline-based classes of Area I. In the residential setting, much of the learning occurs incidentally and in the context of

student performances, guest speakers, and discussions of the evening film series. The primary goal of the Area I component of the curriculum is not content coverage but "the broader purpose of developing the student's sense of how theory works in organizing a field of knowledge" (Churchill & Haggard, n.d.). In addition, no provisions are made for AGS instructors to construct or administer tests. Finally, it is the policy of the AGS to encourage self-direction and the spirit of intellectual inquiry without the use of tests and grades. Therefore, outcome measures were selected for Areas II and III of the curriculum.

The Perry scheme of epistemological thinking was the primary measure of program impact on cognitive outcomes (Perry, 1981). Through the use of open-ended interviewing of Harvard college students, Perry described cognitive and ethical development of adolescents faced with the challenge of adapting to the diverse and pluralistic viewpoints encountered in a campus setting. The complete Perry scheme includes a continuum of positions beginning with dualism (i.e. right and wrong), moving through multiplicity and relativism, and finally reaching a well-balanced and non-dogmatic commitment. The developmental continuum reflects growth in students' abilities to deal effectively with diversity, to construct a more coherent set of values, and to take responsibility for their beliefs through commitment. In short, Perry's scheme describes epistemological maturity. A more extensive description of Perry's scheme is found in Appendix A.

The particular measure selected for assessing students' cognitive and ethical growth was adapted from Kurfiss (1975). The Kurfiss instrument consists of eight paragraphs, each associated with a position in Perry's scheme. Subjects select the paragraph which best describes their position and paraphrase it. The measure provides an estimate of the subjects' level of thinking about the nature of knowledge and belief.

A second set of outcome measures were selected to assess aspects of personal and social adjustment. Again, these outcomes were based on the goals of the program and the literature on the personal and social concerns of talented youth. Specifically, a goal of the Arkansas Governor's School is "to respond to the personal and social problems often faced by gifted and talented students in the contemporary youth culture. . .some such problems begin with unpleasant social labeling. . ." (Churchill & Haggard, n.d.). To determine the impact of labeling on these adolescents and to investigate any differences which might be

attributable to attendance at the Arkansas Governor's School, a survey was constructed for the study. The instrument contained items based on variables found to be important in previous research on labeling (Guskin, Zimmerman, Okolo, & Peng, 1986; Janos, Fung, & Robinson, 1985). The survey contained both open-ended and Likert items. Part A included two open-ended questions concerning the meaning of the gifted label and the context in which it was first applied. Part B was a series of twelve Likert scales assessing the degree to which respondents accepted the gifted label, believed others such as family and peers applied it to them, and felt "different" because of the label. Five of the twelve scales also included a request for further open-ended explanation. A brief rationale for the inclusion of the specific items is found in Appendix B.

Data Collection

Data were collected from the 1987 Arkansas Governor's School attendees during the final week of the program. Four assistants administered the two instruments on-site in group settings. Standardized written directions were provided to assistants collecting data from the participants. Due to the sensitive nature of the questions, the labeling instrument was identified by subject number only.

Data were collected from the comparison group by mailed survey. An initial mailing, three follow-up mailings and follow-up telephone contacts were used to secure as many returns as possible.

Data Analysis

Statistics on respondents' demographic information were computed. Percentages of respondents for each Perry level were calculated. A test of proportions was performed to determine differences between students served by the program and those who were not. Mean scores for each of the Likert scales were computed, and differences between these means were tested. Due to missing data on some cases, numbers of subjects for each analysis differ slightly. Open-ended data from a random sample of 30 experimentals and 30 subjects from the comparison group were subjected to content analysis by two raters who did not know whether respondents attended Governor's school or not.

Results

Perry level of respondents. The level of emerging relativism was most frequently selected by all respondents (44.3%). This level is characterized by relativistic thinking, that is, multiple viewpoints are recognized but are evaluated in context. Relativists realize judgements are possible on the basis of supportive evidence, but often suffer from ambivalence. The four most sophisticated positions (5, 6, 7, and 8) assessed by Kurfiss' instrument were selected by 44.3%, 16.7%, 9.3%, and 14.5% of the respondents. Table 2 provides the percentages of respondents selecting each of the eight positions. Descriptively, the total number of respondents who selected the four most sophisticated positions represented 84.4%; the four least sophisticated, 15.2%.

In a normal test of proportions comparing the relative percentages of experimentals and the comparison group in the higher levels, 5 and above, significant differences were obtained ($Z = 2.27$, $p<.05$). As expected, attendees of the AGS were more likely than nonattendees to score at the higher levels of Perry's scheme. As an inspection of Table 2 indicates, the differences are due to the small percentages of AGS attendees scoring at the lowest levels, and the substantially larger numbers of attendees scoring at the highest three levels. Descriptively, 7.6% of the Governor's school attendees scored at the lowest levels compared with 13.% of the nonattendees. In contrast, 33.4% of the nonattendees scored at the highest levels; while a full 42.6% of the AGS attendees scored at the highest levels. These results are particularly striking in light of constraints imposed in collecting data for the study. The AGS attendees responded in July; nonattendee alternates responded to repeated survey mailings from August through November. Therefore, included in the comparison group are responses from subjects who had an additional four months of maturity. Despite this conservative comparison, AGS attendees did as a group score significantly higher than the comparison group on the cognitive measure of epistemological thinking.

Reactions to social labeling. The quantitative measures related to labeling are reported in several ways. First, the means are reported descriptively. Secondly, where appropriate, differences between the means for attendees and nonattendees are tested. In selected cases, means which are near the neutral

range on the Likert scales are tested to determine if they differ statistically from the neutral midpoint. Finally, the content analysis of open-ended responses is reported descriptively.

Means and standard deviations for the Likert scales are found in Table 3. Both attendees and nonattendees moderately agree that the gifted label describes them. The mean scores for the experimentals (3.73) and for the comparison group (3.67) were significantly different from neutral but not significantly different from one another ($t = .422$, $p<.05$). According to labeling theory, acceptance of the label by the person to whom it is attached is crucial if labeling is to have any salient effects. Labeling becomes a non-issue if either the "labeler" or the "labelee" does not participate in the process.

Four scales assessed the degree to which the respondents believed various groups--parents, siblings, other students in the high school, and close friends--agreed the gifted label was accurately applied. Previous research has shown that labeling affects family members, particularly siblings (Colangelo & Brower, 1987; Cornell, 1983). Concern is frequently expressed over the alienation from peers and friends as a result of the label. Respondents believe their parents moderately to strongly agree the label has been accurately applied. Mean scores for attendees ($\overline{X} = 4.47$) and nonattendees ($\overline{X} = 4.49$) did not differ statistically ($t = .165$, $p<.05$). Respondents believe their brothers and sisters, high school acquaintances, and close friends would all moderately agree.

The next four scales assess the degree to which the respondents believed they were treated differently by these groups because of the label. The issue of "differentness" has been an area of contention among professionals and parents. Labeling theory posits that attaching a label does, indeed, prompt differences in the reactions of others toward the individual. In dispute is whether the reactions have positive or negative effects (Robinson, 1986). In general these respondents moderately disagree that three of the groups--parents, siblings, and close friends treat them differently because of the label. Content analysis of the requests for further explanation for these items indicate that respondents offer two reasons for disagreeing with the statements. First, they state they have no basis for comparisons. They have been labeled gifted since an early age, thus have no basis for unlabeled experiences to compare. Secondly, respondents believed, some adamantly so, that those closest to them (family and friends) accept them as

individuals rather than labeled stereotypes. Further, respondents pointed out that their siblings and close friends were also gifted and thus would be unlikely to treat them differently because they were "in the same boat."

A slightly different pattern was observed for high school acquaintances. Nonattendees moderately disagreed that they were treated differently by their high school cohort because of the label ($\overline{X}$ = 2.64). AGS attendees, were more neutral ($\overline{X}$ = 3.27). These differences were significant (t = -3.62, ($\overline{X}$ = 3.27). An examination of the range of scores on this scale for the experimentals indicates that 54.3% (one out of every two) believe they are treated differently by their high school peers because of the label.

Subjects were also asked if they felt different from other students their age. The comparison group did not ($\overline{X}$ = 3.23), but the experimentals did ($\overline{X}$ = 3.61). These differences were significant (t = -2.00, $p<.05$). To probe further, the next scale assessed the degree to which the respondents liked feeling different. Both groups moderately agreed on were neutral. There was a trend for experimentals to like feeling different more than did the comparison group, but there were no statistical differences (t = 1.42, $p<.05$). Content analysis of the request for further explanation revealed that respondents frequently interpreted feeling different positively. For these subjects, difference was interpreted to mean unique.

Finally, subjects were asked if they felt comfortable with the gifted label overall. Both attendees and nonattendees were positive. Nonattendees moderately agreed ($\overline{X}$ = 2.12). Attendees were more ambivalent; their mean score tended toward neutrality ($\overline{X}$ = 2.86). The differences between the two groups, however, were significant (t = -4.08, $p<.05$), indicating that AGS attendees were less positive than nonattendees.

In addition to the cognitive and affective comparisons, data were also collected from attendees concerning aspects of their AGS experience. By overwhelming percentages, attendees indicated the AGS provided opportunities to share interests with like-minded peers (95.5%). Furthermore, attendees indicated they found the intellectual contacts and friendships made at the AGS of such importance, they planned to maintain them when they returned home (97.0%).

Discussion

Individual testimonials about the importance of attending the AGS indicate many young people believe it has positive effects on them. The results from this study support their assertions.

First, a major goal of the AGS is to provide students with the tools of inquiry and the willingness to engage in spirited discourse about the nature of knowledge and belief. Further, the AGS seeks to provide students with opportunities to critically examine their own knowledge and beliefs in order to construct a consistent, thoughtful view of the world. The significantly greater proportion of AGS attendees who espoused the most sophisticated levels of thinking in Perry's scheme as compared to an equally talented group of students who did not attend indicates the program affected cognitive growth.

These results are a strong indicator of program effectiveness in the area of developing students' thinking. Although the Kurfiss scale is brief, it is supported by a rich descriptive theory of adolescent-young adult cognitive development. A great deal about the young person's system of thought and belief can be inferred from this outcome measure.

More specifically, the majority of talented young people in both groups exhibited the beginnings of relativistic thinking. They have gone beyond the dogmatic assumption that knowledge is right or wrong, the lowest levels of epistemological belief in Perry's scheme. They have also gone beyond a fuzzy multiplicity in which anyone can think what they like because it is not possible to demonstrate the merits of one view over another. The greatest percentage of both attendees and nonattendees are emerging relativists who believe it is important to get a balanced view of the issues by looking critically at several alternatives. There is, however, an inability at this level for specifying criteria one might use to decide which side of an issue has more merit than another.

The AGS curriculum has as one of its aims to help young people become ". . . capable of more than recognition of differences. They must also be able to analyze, criticize, understand, and evaluate the competing or complementary claims such theories make upon our beliefs." (Churchill & Haggard, n.d.). The relatively greater percentages of AGS attendees who attained the three most sophisticated levels in Perry's scheme attest to the impact of the program on cognitive growth. In these levels, subjects come to

realize that theories are metaphors for explaining reality, and that one must make choices among competing claims on the basis of relative merit, empirical fit, and consistency in world view. In its most sophisticated form, the individual realizes that one may engage in critical analysis, but the final decision to select one competing claim over another ultimately requires a leap of faith. Rather than epistemological despair over the intractable nature of knowledge, however, the individual realizes she will adopt and defend her position until new information, new ideas, or personal changes force a reexamination of the position. The willingness of the individual to examine the view to which she is committed differentiates her from the dogmatic, dualistic thinker who adopts a position without critical examination.

Secondly, the results from the social acceptance measures related to labeling indicate that, in general, the AGS does not increase alienation from family and friends. From the perspective of the majority of adolescents, parents, siblings, and close friends accept them as individuals, irrespective of the label.

There are differences between AGS attendees and nonattendees in respect to high school cohort relations and overall "comfortableness" with the gifted label. AGS attendees tend to be neutral; nonattendees feel more comfortable. These differences may be due to the discussions of feelings and attitudes in Area III classes. Although most of the adolescents were coping with the label through positive feelings or neutrality, approximately 14.8% of those attending AGS and 15% of nonattendees denied its application to them. Data from the open-ended responses indicated many equated labeling with stereotyping or pigeon-holing. Angry responses were more noticeable from AGS attendees and are possibly a reflection of the timing and conditions of the on-site data collection. Student schedules were disrupted during the day before the program ended, and on-site data was collected in larger than optimal groups. While group size does not generally affect many paper-pencil cognitive measures, it can make subjects uneasy about revealing feelings. Subjects who must respond to sensitive questions with peers sitting on either side of them are more likely to be defensive than nonattendees who answered survey items in the privacy of their own home.

Finally, the strongly positive attitudes of AGS attendees toward the program's importance in providing them with peer contacts across the state cannot be underestimated. Bringing talented young people

together in a residential setting is catalytic, particularly for students from rural areas who may be isolated by geography and lack of a peer group.

Future Directions

The present study provides directions for future investigations of the AGS. First, subsequent evaluations should extend the range of student outcomes as a means of assessing the impact of the AGS experience on the development of young people. In particular, the sensitivity of the Perry scheme to the goals of the program indicate it is a measure worth pursuing. In addition, studies which examine the relationship between epistemological thinking and adolescent theories of education may illuminate students' readiness to profit from the AGS.

Second, other important outcomes such as post-secondary plans, aspirations, and career goals are worthy of investigation. The suspicion that talented young people leave the state of Arkansas for institutions of higher learning in other areas can be readily examined relative to this important pool of talented young Arkansans. Among this group of young people are some of the state's most talented youth. What are their goals? How and where are they pursuing them? What impact did the AGS have in formulating their goals and articulating their aspirations?

Third, Arkansas is a truly diverse state both geographically and culturally. Of particular interest is the impact the AGS has on talented young people from disadvantaged backgrounds. The effects of urban poverty and rural isolation may be ameliorated by participating in the AGS. Studies which examine the impact of the AGS experience on levels of aspiration and post-secondary plans of disadvantaged youth are important.

Fourth, subsequent studies of the AGS might seek to examine how the diverse faculty of the school translate their expertise into educational experiences in the intensity of the residential setting. An examination of this process in the specialized setting of the AGS with talented faculty and students will further our understanding of educational excellence.

Finally, a longitudinal investigation of the AGS participants would reveal what long-term effects the program has on the talent development of young people in Arkansas.

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TABLE 1

ARKANSAS GOVERNOR'S SCHOOL APPLICANTS/ATTENDED

Year Attended	Number Nominated	Number Attended
1980	401	276
1981	542	298
1982	900	332
1983	1125	402
1984	1237	401
1985	1238	400
1986	1210	400
1987	1297	400

TABLE 2

PERCENTAGES OF SUBJECTS SCORING AT PERRY LEVELS

Perry Level	AGS Attendees	Nonattendees	Total
1	.8	3.3	1.1
2	.5	5.0	1.1
3	6.3	5.0	6.2
4	6.1	11.7	6.8
5	44.7	41.7	44.3
6	17.5	11.7	16.7
7	9.1	10.0	9.3
8	15.0	11.7	14.5

TABLE 3

Note: Scales reverse polarity

* equals significance at the p <.05 level

** equals significance at the p <.01 level

MEANS AND STANDARD DEVIATIONS FOR LABELING SCALES

	Attendees		Nonattendees	
	$\overline{X}$	sd	$\overline{X}$	sd
Label describes me (Agree=5)	3.67	1.09	3.73	0.95
Parents agree (Agree=5)	4.47	0.81	4.49	0.65
Brothers/sisters agree (Agree=1)	2.21	1.10	2.15	1.09
Other students agree (Agree=1)	2.05	1.10	1.98	0.92
Close friends agree (Agree=5)	4.03	1.08	4.02	1.11
Parents treat me differently (Agree=5)	2.27	1.36	1.98	1.28
Brothers/sisters treat me differently (Agree=5)	1.98	1.21	1.91	1.29
Other students treat me differently (Agree=5)	3.27	1.24	2.64	1.28
Close friends treat me differently (Agree=1)	3.95	1.21	3.85	1.39
I feel different from other people my age (Agree=5)	3.60	1.31	3.23	1.53
I like feeling different (Agree=1)	2.40	1.22	2.66	1.46
Overall, I feel comfortable with the gifted label (Agree=1)	2.86	1.33	2.12	1.16

Appendix A

Adapted from Kurfiss' scale of Perry's scheme

**Source: Kurfiss, J. (1975). Late adolescent development: A structural-epistemological perspective. Ann Arbor, MI: Xerox University Microfilms.

Comment on Perry's Position 1: The assumption here is that absolute truth can and does exist, that it is unequivocal, and that anything you want to know about can be evaluated as either true or false, simply by reference to the basic facts of the matter, which are presumably known to someone such as an "authority" or "expert" in the subject. Knowledge is presumed to be self-contained; no concept of theoretical context is allowed. "Ultimate truth" is unchanging knowledge that can be accessed by those who want to verify information or opinions received from some presumably unreliable source.

Comment on Perry's Position 2: This position expresses the wish for simplicity, certainty, clarity, and dualism in the realm of knowledge, but at the same time perceives that this is not always obtainable. The activities of others who do not construe the world so simplistically are seen as attempts to cloud a situation which, were it not for these obstacles, would be cut-and-dried.

Comment on Perry's Position 3: Knowledge is presumed to exist in the form of facts, but some facts are harder than others to find out about. This is interpreted as a temporary obstacle in the way of access to fully elaborated, fully validated, known "truth." The "uncertainty" that is acknowledged is not

seen as a function of the ultimate inseparability of knowledge from context, but rather as a gap in the available knowledge, to be remedied eventually by hard work at uncovering the "rest" of the facts on a topic or issue in a certain area of inquiry.

Comment on Perry's Position 4a: This is Perry's Dual or Complex Dualism, where the world is still divided into two parts but one part is a world of right-wrong dichotomies, and the other is a fuzzy world where no absolute "right" exists. At this level the person does not perceive the possible application of the tools of logic to analysis of the various "opinions" people have offered about issues in the fuzzy areas. The person therefore assumes that such analysis, leading to evaluation of the merits of different opinions, is not possible. Hence, the area is totally open--you can think what you want, since there are no facts and no way to compare and evaluate "opinions."

Comment on Perry's Position 4b: Some areas of inquiry are assumed to lack specific answers, and the person assumes that some systematic method of dealing with this situation is needed. The subject assumes that the way to go is to take a good long look at some of the hypotheses or interpretations that have been offered, seeing each on its own terms, trying to grasp its assumptions, logic, and conclusions. When this has been done for the major approaches, the person has a grasp of the present status of the issues and should try to examine the views in relation to each other. The description is of a procedure to be used to gain a "balanced view," although it begins to presuppose the relative nature of knowledge in the areas where the procedure applies. It does not offer specific suggestions about how one approach might come to be preferred over another.

Comment on Perry's Position 5: Direct knowledge of anything is not possible. The subject assumes that knowledge is always mediated by inferential processes, including the unbridgeable distance between

subject and object. Even (or perhaps above all) perceptual processes are not "pure;" they are always colored by the interpretations and presuppositions through which people examine the world. The end result, this subject says, is that knowledge is only available in the guise of a theory about reality, but can never accurately and unequivocally reflect reality.

Comment on Perry's Position 6: Here the person expresses a desire to go beyond the process of looking at different perspectives open-mindedly. The person expresses a wish for or inclination to make choices among the alternatives. "Electing" to go with one view is intended to convey a conscious, rational, deliberative process which takes into account the merits of the views offered, their empirical "fit," etc. as well as the individual's predisposition to certain types of theories or world-views. The person expresses disdain for the individual who keeps examining different sides ad nauseum and never takes a stand at all.

Comment on Perry's Position 7: Analysis is seen as difficult but necessary. However, it is also seen as insufficient for making decisions; the leap of faith is required if reflection is to pave the way for action, rather than hinder it. The fact that this requires an act of faith is highlighted by the provision that one may discover inadequacies in a current position and will need to revise one's thinking as this occurs. This does not mean the person will be proven wrong in some absolute sense, but simply that the person is trying to maintain openness to new information, new ideas, and changes within himself or herself.

**These comments are Kurfiss' elaborations of the Perry positions upon which her scale is based. Slight editing has been done for clarification.

**Perry's Positions 4a and 4b are treated as separate items in the Kurfiss scale. Thus, the Kurfiss scale has eight items.

Appendix B

Labeling Instrument Rationale

Labeling means attaching a categorical descriptor to a child in order to secure special educational services. The problem lies in how to accomplish the service without disruption and negative "side effects." The problem is certainly multi-faceted; labeling has the potential to affect the labeled child and others around him. It is necessary to look at labeling from the perspective of the labeled individual and from the perspective of those doing the labeling as well. Labeling is a social process, so it is imperative that we look at the social web of relationships which are affected by the practice. Basically, there seem to be three major areas of concern in the labeling of children and youth. First, labels may cause them to develop negative feelings and act differently from nonlabeled peers. Secondly, labels may be stigmatizing, i.e. others view the label negatively and say so. Finally labels may trigger expectancies and therefore affect interpersonal relationships.

Of particular interest is the issue of "differentness." Janos, Fung, and Robinson (1985) found that labeled children who said they felt different also reported fewer friends and were less well-adjusted. Their sample included children of many ages and did not focus on adolescents. The present study targets adolescents and seeks to unravel the perceptions labeled young people have about being different. Do they consider "different" to mean unique (positive) or freakish (negative)?

In contrast to previous studies, the present investigation analysizes separately the perceptions of labeled individuals about several groups of significant others--parents, brothers and sisters, close friends and high school acquaintances. It also examines more closely the issue of "differentness" and howadolescents interpret the concept when it is applied to them.

**Sections of the rationale were originally presented in Robinson, A. (1987) A look at labeling: Early scholar address. Annual Convention of the National Association for Gifted Children.

Appendix C

Governor's Advisory Council For Gifted/Talented Education

1. Dr. J. Bill Berry
   Jonesboro, AR

2. Dr. Charles Donaldson
   Little Rock, AR

3. Ms. Elaine Dumas
   Little Rock, AR

4. Ms. Bettie Hill
   Little Rock, AR (formerly of Ashdown, AR)

5. Dr. Stanley D. Lombardo
   Russellville, AR

6. Ms. Azile Moak
   Clarksville, AR

7. Ms. Ora Stevens
   Marianna, AR

8. Ms. Jean Vandiver
   Forrest City, AR

9. Dr. Rose Marie Word
   Pine Bluff, AR